

WHAT IS CLAIMED IS:

1. A photothermographic material, comprising at least a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder, wherein a total silver iodide content of the photosensitive silver halide is 40% by mole or more and thermal development is started within 60 sec after exposure.

2. The photothermographic material according to claim 1, wherein the total silver iodide content of the photosensitive silver halide is 90% by mole or more.

3. The photothermographic material according to claim 1, wherein the photosensitive silver halide is formed in the absence of the non-photosensitive organic silver salt.

4. The photothermographic material according to claim 1, wherein the thermal development is started within 30 sec after the exposure.

5. The photothermographic material according to claim 1, wherein the thermal development is started within 15 sec after the exposure.

6. The photothermographic material according to claim 1, comprising a compound expressed by the following general formula (H) on an image forming layer side of a

support:

general formula (H)



wherein Q represents an alkyl group, an aryl group or a hetero ring group; Y represents a divalent linkage group; N represents 0 or 1; Z_1 and Z_2 each independently represents a halogen atom; and X represents a hydrogen atom or an electron-withdrawing group.

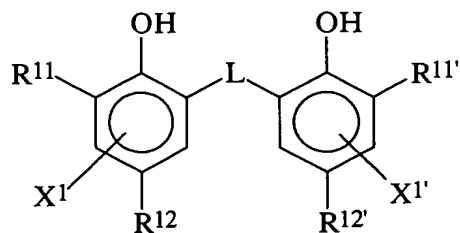
7. The photothermographic material according to claim 1, wherein an average grain size of the photosensitive silver halide is 5 nm to 80 nm.

8. The photothermographic material according to claim 1, wherein an average grain size of the photosensitive silver halide is 5 nm to 30 nm.

9. The photothermographic material according to claim 1, wherein the photosensitive silver halide is chemically sensitized.

10. The photothermographic material according to claim 1, comprising a compound that can be one-electron-oxidized to provide a one-electron oxidation product which releases one or more electrons.

11. The photothermographic material according to claim 1, comprising a compound expressed by the following general formula (R):



wherein R¹¹ and R^{11'} each independently represents an alkyl group having 1 to 20 carbon atoms, R¹² and R^{12'} each independently represents a hydrogen atom or a group capable of substituting for a hydrogen atom on a benzene ring, L represents a -S- group or a -CHR¹³- group, R¹³ represents a hydrogen atom or an alkyl group having 1 to 20 carbon atoms, and X¹ and X^{1'} each independently represents a hydrogen atom or a group capable of substituting for a hydrogen atom on a benzene ring.

12. The photothermographic material according to claim 1, comprising a developing accelerator.

13. The photothermographic material according to claim 1, comprising a hydrogen bonding compound.

14. A method for forming an image comprising: providing the photothermographic material according to claim 1 substantially in the form of a sheet, exposing a part of the sheet and simultaneously developing a part of the sheet that has already been exposed.

15. An image forming method of a photothermographic material, wherein photothermographic material according to claim 1 is exposed using a laser.

16. The image forming method according to claim 15, wherein the laser is a laser diode.

17. The image forming method according to claim 16, wherein the laser diode has a light-emission peak intensity in the wavelength of 350 nm to 450 nm.